

Market based pricing: An approach involves basing prices on the product's perceived value and competitors' actions, or based upon existing market conditions. Thus it begins with the price for which product can be sold.

Steps

- **Develop** a product that satisfies the needs of potential customers.
- **Determines** a target price
- **Derive** a target cost per unit by subtracting target operating income per unit from the target price
- **Perform** value engineering to achieve target cost

Market-based pricing is appropriate when the product is similar to competitors' product or when a company operates in competitive market.

Target price is the expected market price for a product, given the company's knowledge of its consumers' perceptions of value and competitors' responses.

Target cost per unit is the long-term cost that enables a company to earn its target profit when it sells at target price.

$$\text{Target cost} = \text{Target price} - \text{target profit}$$

Value engineering is a systematic evaluation of all aspects of the value chain, with the objective of reducing costs and achieving a quality level that satisfies customers.

Cost-Based Pricing: This process begins with a cost determination followed by setting a price that will recover the value chain costs and provide the desired return on investment.
In this approach the company sets price by:

Steps

- **Calculate** the full cost of the product.
- **Derives** the markup component (a percentage of the full cost; or the ROI per unit).
- **Calculate** the price of product by adding the markup component to the full cost of the product.

This approach is appropriate when a company's product different from its competitors, e.g. automobile manufacturing.

Non-financial factors in price determination

- **The quality** of the product.
- **The lifetime** of the product.
- **The customer's** relative preference for quality compared with price.

Two approaches to monitoring the employees' knowledge and understanding of the company's code of ethics. In general each approach involves asking people questions in order to learn what they know and how much they understand about the company's ethical values.

Human Performance Feedback Loop - This approach is focuses on the individual and is conducted openly between individuals and their immediate supervisors.

Survey Tools - In this approach the employee provides answers based upon standard choices.

Horizontal merger: Merger that take place between or among firms in the same line of business, such as bank mergers.

Vertical merger: combines a firm with one of its suppliers or customers.

Congeneric merger: is a combination of firms with related products or services; however the firm's don't produces the same product or have a producer-supplier relationship.

Conglomerate merger: is a merger of combination of firms in unrelated industries, each making very different types of products.

Reasons of acquisition

- Obtain another company's assets, skills, technology, or customers.
- Achieve economies of scale.
- Reduce the cost of capital.
- Tax savings.
- Revenues enhancement.
- Diversification.

Breakeven point definition → is the level at which total revenue equal total costs

$BVP \text{ in units} = \text{Total fixed costs} / \text{unit contribution margin}$

$BVP \text{ in dollars} = \text{Total fixed costs} / \text{contribution margin ratio}$

Breakeven point used by firms to:

- **Determine** the amount of remaining capacity after breakeven point is reached.
- **Determine** what product they will supply at a given price and costs.
- **Determine** the amount of increase in profit if the company increase fixed marketing costs.
- **Determine** the amount of increase in profit if the company reducing the sales price.

Breakeven point limitations:

- **It assumes** that changes in the levels of revenues and costs arise only because of changes in the number of product (or service) units sold. The number of units sold is the only revenue driver and the only cost driver. In fact revenues are changed based on many factors (such as sales mix, selling price ...etc.)
- **It assumes** that total costs can be separated into two components: a fixed component that does not vary with units sold and a variable component that changes with respect to units sold. In fact this is not easy to achieve.
- **It assumes** that selling price, variable cost per unit, and total fixed costs (within a relevant range and time period) are known and constant. In fact this is not true somewhat.
- **It assumes** that production equal to sales. That is not conforming to GAAP.

Margin of safety is the excess of budgeted sales over breakeven sales

$\text{Margin of safety} = \text{budgeted sales} - \text{breakeven sales}$

$\text{Margin safety ratio} = \text{margin of safety} / \text{budgeted sales}$

Margin of safety used by firms to:

- **Determine** the risk of a product, the higher margin of safety, the lower risk is.
- **Is useful** when the significant proportion of sales at risk of decline or elimination.

A Days' sales in receivable, or average collection period is a measure of liquidity.

The average collection period measures the number of days between the date of sale and the date of collection.

Average collection period used by firms to:

- **Compare** with standard company's credit terms.
The comparison determines how efficiently the company manages its receivables.
- **Compare** average collection period from year to year, to see the changes over time.
- **Compare** with its industry average and its competitors to judge collection performance.

Factoring receivables without recourse: is a finance transaction in which a business sells its accounts receivable to a third party (called a factor) at a discount. The company transferred all risk of non-collection to the factor. The factor does not have any recourse to the company if the customer fails to pay.

Systematic risk: is risk that all investments are subject to. It is caused by factors that affect all assets.

Systematic risk: is measured by the covariance between the security's return and the general market.

Call option gives the buyer of the call option **the right (but not the obligation) to buy** the underlying security at the strike price (the exercise price) from the seller of the option.

Put option gives the buyer of the put option **the right (but not the obligation) to sell** the underlying security at the strike price to the seller of the option.

“Beta,” or β , is a measurement of a security’s systematic risk.

Capital budgeting is the process of planning and controlling investments for long-term projects.

Payback period: The length of time required to recover the cost of an investment.

Payback advantages

- It is simple and easy to understand.
- It can be useful for preliminary screening when there are many proposals.
- It can be useful when expected cash flows in later years of the project are uncertain.

Payback disadvantages

- It ignores all cash flows beyond the payback period.
- It does not incorporate the time value of money
- It ignores the cost of capital

Discounted Payback Period Advantages:

- Use the time value of time.
- More conservative technique.

Discounted Payback Period Disadvantage:

- Loses the simplicity of the basic method.
- Still ignores the cash flows occur after cutoff date.

IRR Advantages:

- Consider the time value of money.
- Measure the true economic rate of return.
- Easy to communicate and understand.

IRR Disadvantages:

- Assumed that the cash flows are reinvested at the rate of return of the project.
- Negative cash inflow will produce more results.

NPV advantages

- In the calculation of NPV, both after cash flow and before cash flow over the life span of the project are considered.
- Profitability and risk of the projects are given high priority.
- NPV helps in maximizing the firm's value.

NPV Disadvantage

- NPV cannot give accurate decision if the amount of investment of mutually exclusive projects is not equal.
- It is difficult to calculate the appropriate discount rate.
- NPV may not give correct decision when the projects are of unequal life.

Sensitivity Analysis

Is a "what if" technique used to determine how different values of an independent variable will impact a particular dependent variable under a given set of assumptions.

Qualitative considerations in capital budgeting evaluations:

- Loan provisions and covenants.
- Insufficient qualified staff to implement the project.
- Decision maker may be risk averse.
- Capital rationing limitations.
- The absence of sufficient information to the decision makers.

Markup pricing: The practice of adding a constant percentage to the cost price of an item to arrive at its selling price.

Dupond analysis Assets are measured at their gross book value rather than at net book value in order to produce a higher return on equity (ROE). It is also known as "DuPont identity"

what are the advantages of ROE DuPont? Three advantages: **Measures:**

- How efficiently inputs are being used to generate profits [Earnings]
- How well capital assets are being used to generate gross revenues [Turnings]
- How well the business is leveraging its debt capital [Leverage]

ROE = Profit Margin (Profit/Sales) * Total Asset Turnover (Sales/Assets) * Equity Multiplier (Assets/Equity)

Sustaining equity growth: The maximum growth rate that a firm can sustain without having to increase financial leverage.

$ROE \times (1 - \text{dividend-payout ratio})$

Real option is the right, but not the obligation, to acquire the gross present value of future expected cash flows by making an investment on or before the date the opportunity expires.

Operating lease A contract that allows for the use of an asset, but does not convey rights of ownership of the asset.

Capital lease A lease considered to have the economic characteristics of asset ownership.

Limitations of Financial Ratios

- Inflation may have badly distorted a company's balance sheet
- Seasonal factors can also distort ratio analysis.
- Different accounting practices can distort comparisons even within the same company.

Cost of capital The cost of funds used for financing a business.

WACC A calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All capital sources - common stock, preferred stock, bonds and any other long-term debt - are included in a WACC calculation

Types of risks

Operational risks are risks that result from inadequate or failed internal processes

Financial risks are risks connected to the financial health of the company

Strategic risks include risks that are on a more global, or macro, level for the business.

Hazard risk is the type of risk that is can be insured against

Advantages of Issuing Common Stock

- Common stock does not have a fixed payment
- Shares do not mature and do not require a future repayment of the principal.
- Common stock provides the firm with greater flexibility in its financial structure.

Disadvantages of Issuing Common Stock

- There is a limit to the number of shares a company can issue.
- The cost of issuing stock may be higher than the cost of issuing debt
- The issuance of too many shares can move the average cost of capital above the most optimal level for the firm.

Advantages of issuing preferred shares

- The voting control of the company is not diluted
- In most cases any unusually high profits are maintained for the common shareholders rather than needing to be distributed as a dividend to preferred shareholders.

Disadvantages of issuing preferred stock

- The dividends are not tax-deductible and
- In the case of cumulative dividends, there is still a need to “make up” dividends not paid during periods when there are low, or no, profits.

Post-audit of a capital budgeting project involves comparing the actual costs and benefits of the project with the original estimates

→ Serves as a control mechanism

→ Helps managers identify errors in their capital budgeting decisions

Hurdle rate the minimum rate of return on a project or investment required by a manager or investor.

Risk assessment is the process of quantifying the different identified risks.

Capital Rationing Definitions It is the insufficient funds needed to be invested into the project, or where the firm can't undertake all profitable projects.

Methods to reduce the risk in capital budgeting:

- Risk adjusted discount rate.
- Certainty equivalent adjustments.
- Sensitivity analysis (what if analysis)
- Simulation analysis.
- Breakeven analysis and tree decisions

Ways to speed up cash collection:

- Lock Box system.
- Electronic funds transfer (EFT).
- Decentralization collections and deposits.
- Depositary transfer checks (DTC).
- Compensating balance.

Ways to slowing cash payment:

- Centralization payments.
- Payable through drafts.
- Drafts in future times.
- Cheques without sufficient balance.

Reasons of carrying inventory:

- Hedging against supply uncertainty.
- Hedging against demand uncertainty.
- Ensuring that the operations will not stop by inventory shortage.
- Minimizing the total cost.

Costs related to inventory:

- Purchasing costs.
- Carrying costs.
- Ordering costs.
- Stock out costs.

Acquisition: it is when a company acquires another company as a part of strategy.

Consolidation: is the combination of two or more company into a new entity in the business.

Spin off: type of restructuring by established a new separate entity and transferring the new firm's stocks to the shareholders in the original company.

Liquidity Crave out: is a type of divestiture when the company sells the stocks of its division in the public but retain the control over the new entity.

Synergy: is occurred when the value of new firm exceeds the value of past separate firms.

Liquidation: where the assets are sold piecemeal (gradual).

Managerial Buyout: where the managers become the firm owners.

Leveraged Buyout: where the acquirer borrows the needed funds from a third party to finance the acquiring transaction and used the acquired company's assets as collateral.

Bankruptcy: it is when the firm cannot meets its debt overall or become insolvency where its debts become more than its assets and the bankruptcy has two options, liquidation (chapter 7) or reorganization (chapter 11).

Factors should be considered when investing in Marketable Securities?

- Safety.
- Maturity.
- Marketability or liquidity.
- Yield (return).
- Taxable.

Liquidity: the ability to convert an investment to cash quickly without the loss of principal.

Marketability: the ability to sell an investment in the market quickly.

Factors affected exchange rates:

- Trade factors (short term): affect the demand of goods
- Income levels.
- Inflation rates.
- Government Intervention.
- Financial factors (long term): affects the demand of securities.
- Interest rates.
- Ease of capital flow (the most important factor).

Tools for mitigating the exchange rate risk:

In short term:

- Money markets hedges.
- Future contracts (through clearing houses, the prices market to market update).
- Currency options.

In long term:

- Forward contracts (between firms, locked prices).
- Currency swaps.

The importance of price elasticity: it is useful to a firm wondering how a change in product price will affect the total revenues for the product.

Receivables turnover Ratio

An accounting measure used to quantify a firm's effectiveness in extending credit as well as collecting debts.

Currency Swap

A swap that involves the exchange of principal and interest in one currency for the same in another currency.

Currency Futures

A transferable futures contract that specifies the price at which a currency can be bought or sold at a future date.

What are the different types of risks in international trade?

Documentation Risk f Economic Risk f Cultural Risk f Legal Risk f Foreign Exchange Risk f Interest Rate Risk f Political/Sovereign Risk f Transit Risk

Diversification A risk management technique that mixes a wide variety of investments within a portfolio.

Benefits of diversification

- Risk Reduction
- Capital Preservation
- Ability to Hedge Your Portfolio

Financial Instrument

A real or virtual document representing a legal agreement involving some sort of monetary value.

Types of Financial Instruments

- Equities
- Mutual funds
- Bonds
- Cash equivalents

Types of non-financial instruments

- Real estate
- Gold

Assets turnover: measures a firm's ability to generate earning from its resources.

DOL: A measure of the change in EBIT resulting from a given change in sales.

Financial leverage is the use of debt to increase earnings.

Net profit after taxes = retained earnings / (1 – payout ratio)

Gross profit margin = gross profit / net sales

Operating profit margin = EBIT / net sales

Net profit margin = net income after interest and tax / net sales

Earning power is the capacity of the firm's operations to produce cash inflows.

An accounting error results from

- Mathematical mistake
- Mistake in the application of GAAP
- Oversight or misuse of facts existing when the statements were prepared

An accounting error related to a prior period is reported as a prior-period adjustment by restating the prior-period statements

The slope of a security market line is the market risk premium.

Value of stock $\text{Dividend} / (\text{required return} - \text{Dividend growth rate})$

Refunding is replacing an old debt issue with a new one, usually to lower interest cost, refunding is not a method for retiring preferred stock.

The firm can reduce its overall risk by diversification into investments that are not highly correlated with its current operations

Risk premium = $\text{Beta} (\text{return to the market} - \text{Risk free rate})$

Market risk premium = $(\text{market return} - \text{risk free rate})$

Protective clauses or restrictions in bond indentures and loan agreements are known as covenants and can include items such as working capital requirements and capital expenditure limitations.

Underwriting spread difference between the price the investment bankers pays for a new security issue and the price at which the securities are resold.

Junk bonds are every high-risk, high-yield securities issued to finance mergers.

They are also issued by troubled companies; they exploit the large tax deductions for interest payments by entities with high ratios.

A naked (uncovered) option: is a call option that doesn't have the backing of stock.

Retained earnings is the cumulative accrual-basis income of the corporation (**minus**) amounts paid out in cash dividends (**minus**) amounts reclassified as additional paid-in capital from stock dividends.

A cash flow hedge is an instrument designed as hedging the exposure to variability in expected future cash flows attributed to a particular risk.

A bond is a long-term debt instrument with a final maturity generally being 10 years or more, if the security has a final maturity shorter than 10 years, it's generally called **a note**

Cost of preferred stock = $\text{stated annual dividend} / \text{market price} - \text{cost of issue}$

Disbursement float refers to the period between the payment of an invoice and the clearing of the payment through the company's bank, this time period is unaffected by the use of a zero balance account.

Mail float: is the time between when a check is mailed and when it's received by the payee

Processing float: is the time between when a payee receives a check and when it's deposited at bank

Availability float: is the time between the check depositing and when it's availability in the firm's account
short-term securities issued by the federal housing administration are known as **agency securities**

If the **ordering costs** increase, the EOQ model would increase the order quantity

If the **carrying costs** increase, the EOQ model would decrease the order quantity

Purchase price and safety stock don't affect the EOQ model

A transaction loan is generally for one specific purpose like completing a specific contract

While **term and installment loans** are generally one year or greater

Primary market: the market through which new issuance of bonds and stock securities are issued

The ex-dividend date is the date when the right to a dividend expires.

Advantages of leasing

1. It's a flexible financing, which have a fewer restrictive covenant the loan agreement
2. Smooth expenses because uniform payment system
3. It can provide 100 % financing
4. Avoidance of risk of obsolescence by lease

Disadvantages of leasing

1. Costly
2. Lease may have difficulty getting lesser approval for improvements needed on leased asset
3. Lease may not be able to cancel the lease without payment of penalty

Concerns that is **unique to foreign investments**

- Exchange rate changes
- Purchasing power parity
- Expropriation

Aren't unique

- Changes in interest rates

Loss frequency → the likelihood of the risk's occurring

Loss severity → the potential impact of the event if it does occur

Expected loss → an amount that management expects to be lost per year on average over a period of several years

Enterprise risk → any event or action that can keep an organization from achieving its objectives

The rate used to discount future cash flow is sometimes called the cost of capital, the discount rate, and the cut off rate or the hurdle rate

The required rate of return or hurdle rate is the base line rate against which potential capital projects are judged, thus it cannot be used to judge the worth of individual projects.

If the **cost of capital** is reduced, **PV** factors are increased

Under NPV and **IRR** the reinvestment rate is the cost of capital rate and the internal rate of return, respectively

NPV is the most satisfactory method of evaluating competing capital projects

When **cash flows** Of a project change sign more than once, there will be multiple IRRs; in this case, **NPV** is the preferred measure.